Jacob Stringfellow

STAE Homework Write-up

Due to the minimal information on what the Parking Calculator specifications were, much of my testing approach came from putting in values I believed to be invalid and making sure that the result reflected that. I also based tests on common-sense and thought about usability and user-experience. Later research showed that my main testing strategies were the black-box testing, boundary testing, and fuzz testing approaches.

Most of the invalid testing came with submitting empty fields and putting dates & times that are non-existent, while the user-experience tests came from what I thought would be the most easy to understand the results that were being given.

I used the Selenium framework along with the C# programming language to write my automated tests. I used two Selenium NuGet packages to assist with my testing efforts, Selenium WebDriver and Selenium WebDriver Support Classes, along with a reference to Visual Studio Test Tools Unit Testing. I am able to run my tests using MS Test, which is built into Visual Studio.

My Test Cases:

Case 4: Submit Page on Page Load

Navigate to <http://adam.goucher.ca/parkcalc/index.php>

Click Calculate

Check that the following error message appears: “ERROR! Enter A Correctly Formatted Date”

Case 5: Short-Term Parking Entry Time After Exit Time

Navigate to <http://adam.goucher.ca/parkcalc/index.php>

Select the Short-Term Parking

Enter 11:00 and 01/01/2014 in the Choose Entry Date and Time section

Enter 8:00 and 01/01/2014 in the Choose Leaving Date and Time section

Click Calculate

Check that the following error message appears: “ERROR! Your Exit Date or Time Is Before Your Entry Date or Time”

Case 6: Invalid Time With :00

Navigate to <http://adam.goucher.ca/parkcalc/index.php>

Select Short-Term Parking

Enter 159357:00 and 01/01/2014 in Choose Entry Date and Time section

Enter 11:00 and 01/01/2014 in Choose Leaving Date and Time section

Click Calculate

Check that the following error message appears: “ERROR! Your Entry or Exit Time Is Invalid”

Case 7: Invalid Time Without :00

Navigate to <http://adam.goucher.ca/parkcalc/index.php>

Select Short-Term Parking

Enter 159357 and 01/01/2014 in Choose Entry Date and Time section

Enter 11:00 and 01/01/2014 in Choose Leaving Date and Time section

Click Calculate

Check that the following error message appears: “ERROR! Your Entry or Exit Time Is Invalid”

Case 8: Fields Match After Calculation

Navigate to <http://adam.goucher.ca/parkcalc/index.php>

Select Long-Term Surface Parking

Select the PM option for Entry Time

Enter 10:00 and 01/01/2014 in Choose Entry Date and Time section

Enter 11:00 and 01/01/2014 in Choose Leaving Date and Time section

Click Calculate

Check that each field that was updated matches after calculation

Case 9: Empty Entry and Exit Dates

Navigate to <http://adam.goucher.ca/parkcalc/index.php>

Clear Entry Date

Clear Exit Date

Click Calculate

Check that the following error message appears: “ERROR! Enter A Correctly Formatted Date”

Case 10: Empty Entry Date

Navigate to <http://adam.goucher.ca/parkcalc/index.php>

Clear Entry Date

Enter 01/01/2014 in Choose Leaving Date and Time section

Click Calculate

Check that the following error message appears: “ERROR! Enter A Correctly Formatted Date”

Case 11: Empty Exit Date

Navigate to <http://adam.goucher.ca/parkcalc/index.php>

Enter 01/01/2014 in Choose Entry Date and Time section

Clear Exit Date

Click Calculate

Check that the following error message appears: “ERROR! Enter A Correctly Formatted Date”

Case 12: Empty Entry And Exit Times

Navigate to <http://adam.goucher.ca/parkcalc/index.php>

Clear Entry Time

Clear Exit Time

Enter 01/01/2014 in Choose Entry Date and Time section

Enter 01/01/2014 in Choose Leaving Date and Time section

Click Calculate

Check that the following error message appears: “ERROR! Enter A Correctly Formatted Time”

Case 13: Zero Hours of Short-Term Parking

Navigate to <http://adam.goucher.ca/parkcalc/index.php>

Select Short-Term Parking

Enter 10:00 and 01/01/2015 in Choose Entry Date and Time section

Enter 10:00 and 01/01/2015 in Choose Leaving Date and Time section

Click Calculate

Check that the Cost is equal to $ 0.00

Case 14: Zero Hours of Economy Parking

Navigate to <http://adam.goucher.ca/parkcalc/index.php>

Select Economy Parking

Enter 10:00 and 01/01/2015 in Choose Entry Date and Time section

Enter 10:00 and 01/01/2015 in Choose Leaving Date and Time section

Click Calculate

Check that the Cost is equal to $ 0.00

Bug Reports:

Bug #1

Selecting PM adds 12 hours to the time after submit

Repro:

Navigate to <http://adam.goucher.ca/parkcalc/index.php>

Enter in 10:00 for Entry

Enter in 4:00 PM for Leaving

Enter the same valid date for Entry and Leaving

Click Calculate

Notice that after the page refreshes, 4 is now 16:00 with AM selected

Bug #2

Selected lot is not carried over after submit

Repro:

Navigate to <http://adam.goucher.ca/parkcalc/index.php>

Select Economy Parking

Enter in valid Entry and Exit Time and Date values

Click Calculate

Notice that the Lot is back to Short-Term Parking

Bug #3

Invalid times are accepted

Repro:

Navigate to <http://adam.goucher.ca/parkcalc/index.php>

Enter in the same valid Entry and Exit Date

Enter in “Jacob” for entry time

Enter in “159357” for exit time

Click Calculate

Notice that the page submits and calculations are made

Bug #4

NULL dates are accepted

Repro:

Navigate to <http://adam.goucher.ca/parkcalc/index.php>

Clear out Entry and Exit date fields

Click Calculate

Notice that the page submits and calculations are made

Bug #5

NULL times are accepted

Repro:

Navigate to <http://adam.goucher.ca/parkcalc/index.php>

Enter in the same valid Entry and Exit Date

Clear out the Entry and Exit Times

Click Calculate

Notice that the page submits and calculations are made

Bug #6

Charged for zero hours of Short-Term Parking

Repro:

Navigate to <http://adam.goucher.ca/parkcalc/index.php>

Select Short-Term Parking

Select the same valid Entry and Exit Dates and Times

Click Calculate

Notice the total for zero hours is $2

Bug #7

Charged for zero hours of Valet Parking

Repro:

Navigate to <http://adam.goucher.ca/parkcalc/index.php>

Select Valet Parking

Select the same valid Entry and Exit Dates and Times

Click Calculate

Notice that the total for zero hours is $12

Bug #8

Entry Time after Exit time is accepted

Repro:

Navigate to <http://adam.goucher.ca/parkcalc/index.php>

Enter in the same valid Entry and Exit date

Enter in 11:00 AM for Entry Time

Enter in 8:00 AM for Exit Time

Click Calculate

Notice that the page submits and calculations are made